



IFWO

RAW SEQUENCE LISTING

DATE: 09/17/2004

PATENT APPLICATION: US/10/812,782

TIME: 16:56:14

Input Set : A:\PTO.FG.TXT

Output Set: N:\CRF4\09172004\J812782.raw

3 <110> APPLICANT: Liew, Choong-Chin
 5 <120> TITLE OF INVENTION: Method for the Detection of Rheumatoid Arthritis Related
 Gene Transcripts

6 in Blood
 W--> 7 <130> FILE REFERENCE: 4231/2055H
 9 <140> CURRENT APPLICATION NUMBER: 10/812,782
 10 <141> CURRENT FILING DATE: 2004-3-30
 12 <150> PRIOR APPLICATION NUMBER: US 10/802,875
 13 <151> PRIOR FILING DATE: 2004-03-12
 15 <150> PRIOR APPLICATION NUMBER: US 10/601,518
 16 <151> PRIOR FILING DATE: 2003-06-20
 18 <150> PRIOR APPLICATION NUMBER: US 10/268,730
 19 <151> PRIOR FILING DATE: 2002-10-09
 21 <150> PRIOR APPLICATION NUMBER: US 10/085,783
 22 <151> PRIOR FILING DATE: 2002-02-28
 24 <150> PRIOR APPLICATION NUMBER: US 09/477,148
 25 <151> PRIOR FILING DATE: 2000-01-04
 27 <150> PRIOR APPLICATION NUMBER: US 60/271,955
 28 <151> PRIOR FILING DATE: 2001-02-28
 30 <150> PRIOR APPLICATION NUMBER: US 60/305,340
 31 <151> PRIOR FILING DATE: 2001-07-13
 33 <150> PRIOR APPLICATION NUMBER: US 60/275,017
 34 <151> PRIOR FILING DATE: 2001-03-12
 36 <150> PRIOR APPLICATION NUMBER: US 60/115,125
 37 <151> PRIOR FILING DATE: 1999-01-06
 39 <160> NUMBER OF SEQ ID NOS: 112
 41 <170> SOFTWARE: PatentIn version 3.2
 43 <210> SEQ ID NO: 1
 44 <211> LENGTH: 110
 45 <212> TYPE: DNA
 46 <213> ORGANISM: Human
 48 <400> SEQUENCE: 1
 49 acacaacgta acaataacat atttagccaa tgtagtagac tgctatataa tacattagag 60
 51 tgtcaattca ttccggtttac agccccattg ggtgtcaaat tttttttgtt 110
 54 <210> SEQ ID NO: 2
 55 <211> LENGTH: 530
 56 <212> TYPE: DNA
 57 <213> ORGANISM: Human
 60 <220> FEATURE:
 61 <221> NAME/KEY: misc_feature
 62 <222> LOCATION: (16)..(16)
 63 <223> OTHER INFORMATION: n is a, c, g, or t
 65 <220> FEATURE:
 66 <221> NAME/KEY: misc_feature



RAW SEQUENCE LISTING

DATE: 09/17/2004

PATENT APPLICATION: US/10/812,782

TIME: 16:56:14

Input Set : A:\PTO.FG.TXT

Output Set: N:\CRF4\09172004\J812782.raw

67 <222> LOCATION: (19)..(19) ✓
68 <223> OTHER INFORMATION: n is a, c, g, or t
70 <220> FEATURE:
71 <221> NAME/KEY: misc_feature
72 <222> LOCATION: (25)..(25) ✓
73 <223> OTHER INFORMATION: n is a, c, g, or t
75 <220> FEATURE:
76 <221> NAME/KEY: misc_feature
77 <222> LOCATION: (38)..(38) ✓
78 <223> OTHER INFORMATION: n is a, c, g, or t
80 <220> FEATURE:
81 <221> NAME/KEY: misc_feature
82 <222> LOCATION: (40)..(40) ✓
83 <223> OTHER INFORMATION: n is a, c, g, or t
85 <220> FEATURE:
86 <221> NAME/KEY: misc_feature
87 <222> LOCATION: (42)..(42) ✓
88 <223> OTHER INFORMATION: n is a, c, g, or t
90 <220> FEATURE:
91 <221> NAME/KEY: misc_feature
92 <222> LOCATION: (44)..(44) ✓
93 <223> OTHER INFORMATION: n is a, c, g, or t
95 <220> FEATURE:
96 <221> NAME/KEY: misc_feature
97 <222> LOCATION: (64)..(66) ✓
98 <223> OTHER INFORMATION: n is a, c, g, or t
100 <220> FEATURE:
101 <221> NAME/KEY: misc_feature
102 <222> LOCATION: (70)..(71) ✓
103 <223> OTHER INFORMATION: n is a, c, g, or t
105 <220> FEATURE:
106 <221> NAME/KEY: misc_feature
107 <222> LOCATION: (81)..(81) ✓
108 <223> OTHER INFORMATION: n is a, c, g, or t
110 <220> FEATURE:
111 <221> NAME/KEY: misc_feature
112 <222> LOCATION: (86)..(86) ✓
113 <223> OTHER INFORMATION: n is a, c, g, or t
115 <220> FEATURE:
116 <221> NAME/KEY: misc_feature
117 <222> LOCATION: (89)..(89) ✓
118 <223> OTHER INFORMATION: n is a, c, g, or t
120 <220> FEATURE:
121 <221> NAME/KEY: misc_feature
122 <222> LOCATION: (117)..(117) ✓
123 <223> OTHER INFORMATION: n is a, c, g, or t
125 <220> FEATURE:
126 <221> NAME/KEY: misc_feature
127 <222> LOCATION: (121)..(121) ✓

RAW SEQUENCE LISTING

DATE: 09/17/2004

PATENT APPLICATION: US/10/812,782

TIME: 16:56:14

Input Set : A:\PTO.FG.TXT

Output Set: N:\CRF4\09172004\J812782.raw

128 <223> OTHER INFORMATION: n is a, c, g, or t
130 <220> FEATURE:
131 <221> NAME/KEY: misc_feature
132 <222> LOCATION: (123)..(123)
133 <223> OTHER INFORMATION: n is a, c, g, or t
135 <220> FEATURE:
136 <221> NAME/KEY: misc_feature
137 <222> LOCATION: (135)..(135)
138 <223> OTHER INFORMATION: n is a, c, g, or t
140 <220> FEATURE:
141 <221> NAME/KEY: misc_feature
142 <222> LOCATION: (143)..(143)
143 <223> OTHER INFORMATION: n is a, c, g, or t
145 <220> FEATURE:
146 <221> NAME/KEY: misc_feature
147 <222> LOCATION: (177)..(177)
148 <223> OTHER INFORMATION: n is a, c, g, or t
150 <220> FEATURE:
151 <221> NAME/KEY: misc_feature
152 <222> LOCATION: (179)..(179)
153 <223> OTHER INFORMATION: n is a, c, g, or t
155 <220> FEATURE:
156 <221> NAME/KEY: misc_feature
157 <222> LOCATION: (181)..(181)
158 <223> OTHER INFORMATION: n is a, c, g, or t
160 <220> FEATURE:
161 <221> NAME/KEY: misc_feature
162 <222> LOCATION: (193)..(194)
163 <223> OTHER INFORMATION: n is a, c, g, or t
165 <220> FEATURE:
166 <221> NAME/KEY: misc_feature
167 <222> LOCATION: (209)..(210)
168 <223> OTHER INFORMATION: n is a, c, g, or t
170 <220> FEATURE:
171 <221> NAME/KEY: misc_feature
172 <222> LOCATION: (215)..(215)
173 <223> OTHER INFORMATION: n is a, c, g, or t
175 <220> FEATURE:
176 <221> NAME/KEY: misc_feature
177 <222> LOCATION: (217)..(217)
178 <223> OTHER INFORMATION: n is a, c, g, or t
180 <220> FEATURE:
181 <221> NAME/KEY: misc_feature
182 <222> LOCATION: (221)..(221)
183 <223> OTHER INFORMATION: n is a, c, g, or t
185 <220> FEATURE:
186 <221> NAME/KEY: misc_feature
187 <222> LOCATION: (228)..(228)
188 <223> OTHER INFORMATION: n is a, c, g, or t

RAW SEQUENCE LISTING

DATE: 09/17/2004

PATENT APPLICATION: US/10/812,782

TIME: 16:56:14

Input Set : A:\PTO.FG.TXT

Output Set: N:\CRF4\09172004\J812782.raw

190 <220> FEATURE:
191 <221> NAME/KEY: misc_feature
192 <222> LOCATION: (233)..(233)
193 <223> OTHER INFORMATION: n is a, c, g, or t
195 <220> FEATURE:
196 <221> NAME/KEY: misc_feature
197 <222> LOCATION: (236)..(236)
198 <223> OTHER INFORMATION: n is a, c, g, or t
200 <220> FEATURE:
201 <221> NAME/KEY: misc_feature
202 <222> LOCATION: (243)..(243)
203 <223> OTHER INFORMATION: n is a, c, g, or t
205 <220> FEATURE:
206 <221> NAME/KEY: misc_feature
207 <222> LOCATION: (251)..(254)
208 <223> OTHER INFORMATION: n is a, c, g, or t
210 <220> FEATURE:
211 <221> NAME/KEY: misc_feature
212 <222> LOCATION: (270)..(270)
213 <223> OTHER INFORMATION: n is a, c, g, or t
215 <220> FEATURE:
216 <221> NAME/KEY: misc_feature
217 <222> LOCATION: (272)..(272)
218 <223> OTHER INFORMATION: n is a, c, g, or t
220 <220> FEATURE:
221 <221> NAME/KEY: misc_feature
222 <222> LOCATION: (274)..(275)
223 <223> OTHER INFORMATION: n is a, c, g, or t
225 <220> FEATURE:
226 <221> NAME/KEY: misc_feature
227 <222> LOCATION: (283)..(283)
228 <223> OTHER INFORMATION: n is a, c, g, or t
230 <220> FEATURE:
231 <221> NAME/KEY: misc_feature
232 <222> LOCATION: (292)..(293)
233 <223> OTHER INFORMATION: n is a, c, g, or t
235 <220> FEATURE:
236 <221> NAME/KEY: misc_feature
237 <222> LOCATION: (299)..(299)
238 <223> OTHER INFORMATION: n is a, c, g, or t
240 <220> FEATURE:
241 <221> NAME/KEY: misc_feature
242 <222> LOCATION: (303)..(303)
243 <223> OTHER INFORMATION: n is a, c, g, or t
245 <220> FEATURE:
246 <221> NAME/KEY: misc_feature
247 <222> LOCATION: (307)..(307)
248 <223> OTHER INFORMATION: n is a, c, g, or t
250 <220> FEATURE:

RAW SEQUENCE LISTING

DATE: 09/17/2004

PATENT APPLICATION: US/10/812,782

TIME: 16:56:14

Input Set : A:\PTO.FG.TXT

Output Set : N:\CRF4\09172004\J812782.raw

251 <221> NAME/KEY: misc_feature /
252 <222> LOCATION: (312)..(312) /
253 <223> OTHER INFORMATION: n is a, c, g, or t
255 <220> FEATURE:
256 <221> NAME/KEY: misc_feature /
257 <222> LOCATION: (319)..(319) /
258 <223> OTHER INFORMATION: n is a, c, g, or t
260 <220> FEATURE:
261 <221> NAME/KEY: misc_feature /
262 <222> LOCATION: (324)..(325) /
263 <223> OTHER INFORMATION: n is a, c, g, or t
265 <220> FEATURE:
266 <221> NAME/KEY: misc_feature /
267 <222> LOCATION: (328)..(329) /
268 <223> OTHER INFORMATION: n is a, c, g, or t
270 <220> FEATURE:
271 <221> NAME/KEY: misc_feature /
272 <222> LOCATION: (342)..(342) /
273 <223> OTHER INFORMATION: n is a, c, g, or t
275 <220> FEATURE:
276 <221> NAME/KEY: misc_feature /
277 <222> LOCATION: (345)..(345) /
278 <223> OTHER INFORMATION: n is a, c, g, or t
280 <220> FEATURE:
281 <221> NAME/KEY: misc_feature /
282 <222> LOCATION: (366)..(366) /
283 <223> OTHER INFORMATION: n is a, c, g, or t
285 <220> FEATURE:
286 <221> NAME/KEY: misc_feature /
287 <222> LOCATION: (377)..(377) /
288 <223> OTHER INFORMATION: n is a, c, g, or t
290 <220> FEATURE:
291 <221> NAME/KEY: misc_feature /
292 <222> LOCATION: (382)..(382) /
293 <223> OTHER INFORMATION: n is a, c, g, or t
295 <220> FEATURE:
296 <221> NAME/KEY: misc_feature /
297 <222> LOCATION: (391)..(391) /
298 <223> OTHER INFORMATION: n is a, c, g, or t
300 <220> FEATURE:
301 <221> NAME/KEY: misc_feature /
302 <222> LOCATION: (395)..(395) /
303 <223> OTHER INFORMATION: n is a, c, g, or t
305 <220> FEATURE:
306 <221> NAME/KEY: misc_feature /
307 <222> LOCATION: (400)..(400) /
308 <223> OTHER INFORMATION: n is a, c, g, or t
310 <220> FEATURE:
311 <221> NAME/KEY: misc_feature

RAW SEQUENCE LISTING ERROR SUMMARY
 PATENT APPLICATION: US/10/812,782

DATE: 09/17/2004
 TIME: 16:56:15

Input Set : A:\PTO.FG.TXT

Output Set : N:\CRF4\09172004\J812782.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; N Pos. 16,19,25,38,40,42,44,64,65,66,70,71,81,86,89,117,121,123,135
 Seq#:2; N Pos. 148,177,179,181,193,194,209,210,215,217,221,228,233,236,243
 Seq#:2; N Pos. 251,252,253,254,270,272,274,278,288,292,293,299,303,307,312
 Seq#:2; N Pos. 319,324,325,328,329,342,345,366,377,382,391,395,400,412,413
 Seq#:2; N Pos. 422,424,426,433,439,442,452,460,463,471,495,500,504,516
 Seq#:5; N Pos. 13,14,16,20,21,25,26,27,28,42,52,55,57,59,63,65,68,72,74,77
 Seq#:5; N Pos. 91,102,117,127,128,169,172,192,203,243,244,248,249,253,283
 Seq#:5; N Pos. 288,299,318,327,334,348,359,360
 Seq#:6; N Pos. 475,556,559,585,606,644,671,693,695,714,742,744,756,765,768
 Seq#:6; N Pos. 808,815,823,830,837
 Seq#:10; N Pos. 433,600,615,626,645,661
 Seq#:14; N Pos. 6,15,37,38,47,56,57,94,127,155,157
 Seq#:16; N Pos. 5,15,39,47,52,69,154,207,217
 Seq#:17; N Pos. 18,19,27,47,66,76,82,108,133,162,210,260,276
 Seq#:19; N Pos. 17,40,59,76,107,165,189,216,221,230
 Seq#:21; N Pos. 17,23,28,36,41,44,53,59,62,67,70,71,74,76,79,83,84,86,97
 Seq#:22; N Pos. 2,17,37,52,53,56,77,85,89,96
 Seq#:23; N Pos. 17,19,27,28,29,37,38,46,49,65,72
 Seq#:24; N Pos. 5,13,71,88,91,109,157,177,199,207,211
 Seq#:26; N Pos. 299,333,353,410,411,460,474,479
 Seq#:27; N Pos. 348,422,435,476,490
 Seq#:28; N Pos. 18,47,59,74,138,174,176,211
 Seq#:29; N Pos. 1,2,12,29,34
 Seq#:30; N Pos. 3,4,5,6,8,13,15,20,27,32,33,40,49,50,57,63,67,69,76,78,87
 Seq#:30; N Pos. 89
 Seq#:31; N Pos. 12,26,46,49,55,60,63,69,70,73,79,92,96
 Seq#:32; N Pos. 2,7,27,34,57,63,64,67,73,75,76,77,78,80,90,96,97,98
 Seq#:33; N Pos. 5,12,28,32,38,44,57,68,76,82,92
 Seq#:34; N Pos. 3,21,27,28,38,47,50,53,61,73,78,83,85,97
 Seq#:35; N Pos. 21,22,28,32,65,67,68,70,77,83,92
 Seq#:36; N Pos. 4,8,29,43,44,46,57,59,84,98,115,117,118
 Seq#:37; N Pos. 7,10,53,61,65,66,72,74,75,89,94,100,107,126,141
 Seq#:38; N Pos. 2,10,61,63,72,79
 Seq#:39; N Pos. 5,7,8,10,15,16,20,24,71
 Seq#:40; N Pos. 80,91
 Seq#:42; N Pos. 14,31,36,63,73,93,98
 Seq#:44; N Pos. 2,11,27,28,34,38,39,41,49,50,61,62,67,68,76,79,80,85,89,93
 Seq#:45; N Pos. 8,24,33,34,47,48,58,63,68,71,73,77,88,95,96
 Seq#:46; N Pos. 74
 Seq#:47; N Pos. 7,8,17,23,33,42,47,48,52,55,60,62,66,70,71,74,84,86,87,96
 Seq#:47; N Pos. 99,100
 Seq#:48; N Pos. 5,6,33,35,36,42,46,48,55,59,69,81,87,91,94,97
 Seq#:49; N Pos. 20,38,164,178,201,211,274,305,340,346,386,387,405,433,446
 Seq#:50; N Pos. 5,6,13,18,22,39,45,48,54,65,70,72,80,83,90,94,96,98,102,104

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 09/17/2004
PATENT APPLICATION: US/10/812,782 TIME: 16:56:15

Input Set : A:\PTO.FG.TXT
Output Set: N:\CRF4\09172004\J812782.raw

Seq#:50; N Pos. 113,115,117,121,123,125,128,142,144,160,174,175,180,181,186
Seq#:50; N Pos. 192,198,205,215,223,224,233,234,238,243,253,257,268,280,291
Seq#:50; N Pos. 296,300,305,308,311,319,322,326,328,334,335,338,339,347,352
Seq#:50; N Pos. 358,361,367,382,389,395,410,413,414,418,425,436,443
Seq#:51; N Pos. 19,59,87,119,203,215,274,296,309,353,425,426,427,431,451
Seq#:51; N Pos. 470,472,478
Seq#:52; N Pos. 13,14,17,20,22,27,29,31,36,43,46,58,59,74,78,81,85,87,88,90

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 5

VERIFICATION SUMMARY

DATE: 09/17/2004

PATENT APPLICATION: US/10/812,782

TIME: 16:56:15

Input Set : A:\PTO.FG.TXT

Output Set : N:\CRF4\09172004\J812782.raw

L:7 M:283 W: Missing Blank Line separator, <130> field identifier
L:10 M:256 W: Invalid Numeric Header Field, Wrong Current FILING DATE:YYYY-MM-DD
L:386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
M:341 Repeated in SeqNo=2
L:610 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
M:341 Repeated in SeqNo=5
L:746 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:420
M:341 Repeated in SeqNo=6
L:855 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:420
M:341 Repeated in SeqNo=10
L:963 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
M:341 Repeated in SeqNo=14
L:1045 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
M:341 Repeated in SeqNo=16
L:1121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
M:341 Repeated in SeqNo=17
L:1212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
M:341 Repeated in SeqNo=19
L:1330 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
M:341 Repeated in SeqNo=21
L:1387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
M:341 Repeated in SeqNo=22
L:1439 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
M:341 Repeated in SeqNo=23
L:1506 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
M:341 Repeated in SeqNo=24
L:1584 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:240
M:341 Repeated in SeqNo=26
L:1637 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:300
M:341 Repeated in SeqNo=27
L:1693 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
M:341 Repeated in SeqNo=28
L:1729 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
L:1826 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
M:341 Repeated in SeqNo=30
L:1898 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0
M:341 Repeated in SeqNo=31
L:1970 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0
M:341 Repeated in SeqNo=32
L:2037 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
M:341 Repeated in SeqNo=33
L:2114 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0
M:341 Repeated in SeqNo=34
L:2171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0
M:341 Repeated in SeqNo=35
L:2238 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0
M:341 Repeated in SeqNo=36
L:2317 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0

VERIFICATION SUMMARY

DATE: 09/17/2004

PATENT APPLICATION: US/10/812,782

TIME: 16:56:15

Input Set : A:\PTO.FG.TXT

Output Set: N:\CRF4\09172004\J812782.raw

M:341 Repeated in SeqNo=37

L:2361 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0

M:341 Repeated in SeqNo=38

L:2408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0